

AMENDMENT TO THE CLAIMS

Please **AMEND** claims 2, 8, 14, 19 and 20 as follows.

Please **CANCEL** claims 1, 16 and 18.

A copy of all pending claims and a status of the claims is provided below.

1. (canceled)
2. (currently amended) ~~The method of claim 1~~ A method of photoresist trimming, comprising the steps of:
forming a resist foot in a trench; and
removing the resist foot found in the trench during a trimming process, wherein
the trimming ~~step~~ process comprises ionizing a portion of a mixture of gases comprising O₂ and at least one other oxide gas to form an etchant for the trimming process.
3. (original) The method of claim 2, wherein the mixture of gases comprises any of at least CO₂, SO₂ and NO₂ formed by mixing during a plasma etching process.
4. (original) The method of claim 2, wherein the trimming process is performed on a mask and an upper surface of the mask is resistant to etching.
5. (original) The method of claim 4, further comprising polymerizing an upper surface of the mask.
6. (original) The method of claim 3, further comprising providing a barrier on an upper surface of the mask derived from an oxide gas.
7. (original) The method of claim 3, further comprising arranging a carbon barrier on an upper surface of the mask.

8. (currently amended) The method claim 42, further comprising forming a sidewall in a mask which is to be trimmed during the trimming step-process, and etching a lower portion of the sidewall of the mask using the mixture of gases comprising O₂ and at least one other oxide gas to form the sidewall substantially perpendicular to a surface of the mask.

9. (original) The method of claim 2, wherein the mixture of gases comprising O₂ and at least one other oxide gas in a ratio ranging from about 1:50 to 50:1.

10. (original) The method of claim 2, further comprising forming a mixture of gases comprising O₂ and at least one other oxide gas in a ratio ranging from 1:10 to about 10:1.

11. (original) The method of claim 10, further comprising forming a mixture of gases comprising O₂ and at least one other oxide gas in a ratio ranging from about 1:3.

12. (original) The method of claim 2, further comprising holding the mixture of gases comprising O₂ and at least one other oxide gas at a pressure ranging from about 1 mT to 1000 mT.

13. (original) The method of claim 2, further comprising holding the mixture of gases comprising O₂ and at least one other oxide gas at a pressure ranging from about 1 mT to 100 mT.

14. (currently amended) A method of forming an imaging mask, comprising the steps of:

arranging an opaque layer on a transparent substrate;

arranging a mask material on the opaque layer;

imaging the mask with a prescribed pattern;

forming a trimming gas by mixing O₂ and at least one other oxide gas at a pressure ranging from about 1 mT to 1000 mT; and

trimming an etched mask with a the trimming gas comprising O₂ and at least one other oxide gas.

15. (original) The method of claim 14, wherein the forming the trimming gas comprises mixing any of at least CO₂, SO₂ and NO₂ with O₂ in a ratio ranging from about 1:10 to about 10:1.

16. (canceled)

17. (original) The method of claim 14, wherein the imaging step includes the formation of a mask foot at a based of the prescribed pattern and the trimming step includes removal of the mask foot to form substantially perpendicular sidewalls of the prescribed pattern with respect to a surface thereof.

18. (canceled)

19. (currently amended) ~~The trim gas of claim 18~~ A trim gas for etching a mask foot formed at a base of a sidewall pattern, comprising O₂ and at least one other oxide gas comprising at least any one of CO₂, SO₂, and NO, wherein the O₂ and at least one other oxide gas has a pressure ranging from about 1 mT to 1000 mT.

20. (currently amended) The trim gas of claim ~~18~~ 19, wherein the O₂ and at least one other oxide gas is configured to strengthen an upper surface of a photoresist being trimmed.